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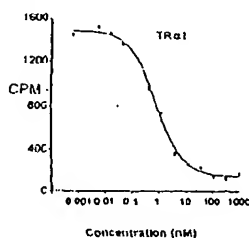
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GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
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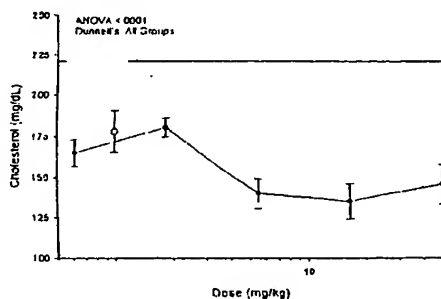
[Continued on next page]

(54) Title: NOVEL PHOSPHORUS-CONTAINING THYROMIMETICS

Homologous Displacement Reactions



T3 Binding Assay Results



Effect of Compound 13-1-*cis* (•) and Compound 18 (○)
on Cholesterol in Cholesterol Fed Rats

(57) Abstract: The present invention relates to compounds of phosphonic acid containing T3 mimetics, stereoisomers, pharmaceutically acceptable salts, co-crystals, and prodrugs thereof and pharmaceutically acceptable salts and co-crystals of the prodrugs, as well as their preparation and uses for preventing and/or treating metabolic diseases such as obesity, NASH, hypercholesterolemia and hyperlipidemia, as well as associated conditions such as atherosclerosis, coronary heart disease, impaired glucose tolerance, metabolic syndromex and diabetes.



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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

compounds of formula III according to claim 14,
pharmaceutical compositions comprising such compound of
formula III, methods including a therapy using such
compound of formula III

12. claim: 73

compounds of formula X

13. claim: 74

Method of improving liver/heart selectivity of a
thyromimetic compound of formula Y

14. claim: 75

Method of increasing the therapeutic index of a thyromimetic
compound of formula Y

15. claim: 76

Method of designing a thyromimetic compound having
improved liver/heart selectivity.

16. claim: 77

Method of designing a thyromimetic compound having
improved therapeutic index

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2006/020607

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 31/28, 31/445, 31/435; C07F 9/06
US CL : 514/492, 514/315, 514/277; 546/22; 556/19

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 514/492, 514/315, 514/277; 546/22; 556/19

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,465,687 B1 (LI et al.) 15 October, 2002 (15.10.2002), column 23-24.	1-116 ----- 1-116
X --- Y	US 3,357,887 (KAGAN et al.) 12 December 1967 (12.12.1967), columns 1 and 10	1-116 ----- 1-116

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"P" document published prior to the international filing date but later than the priority date claimed	

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